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HIGH-SCHOOL JOURNALISM

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The display of school journalism, which formed a part of the recent "budget exhibit" in New York City, attracted much public interest. Sixty publications were shown, ranging from the elaborate yearbooks and monthlies of the high schools to the less ambitious mimeographed sheets of the lower schools. These were from public schools alone; to include journals published in the private schools of the city would more than double this number, and when one thinks of this flood of school journalism spreading the country over, one may well ask whether it justifies the vast expenditure of time and money. For the type of paper or yearbook maintained by a fairly ambitious school will cost all the way from five hundred to a thousand dollars yearly to produce, and such publications exist by hundreds, if not by thousands, throughout the country.

The purpose of this article is to make clear why, in the writer's opinion, this journalistic activity is a vital force for good, to show how it reacts on the editors and on the school, and how it can be helped by the friendly co-operation of some interested teacher.

After some years of experiment and observation, I am confident that school journalism affects in more important ways than at first appear both the editors and the school as a whole. The editors gain a medium for the expression of literary and artistic

talent and of opinion on school topics. They gain influence in the school, of a kind frequently monopolized by the athlete. They gain definite training in writing for a market, under the sharp criticism of their mates; and incidentally a good deal of technical knowledge of typography, pasting-up, proof-reading, and the like. They gain—what literary young folks are apt to need—the power to work in groups, instead of individually. They gain in responsibility, from the necessity of fulfilling regularly recurring obligations to subscribers and advertisers: business obligations, for which the ever-ready “excuse” is no substitute. And they experience from these opportunities and responsibilities the kind of appeal that we teachers find so difficult to put before the clever but self-satisfied pupil; an appeal to rise above the dead level of mediocrity. Mediocrity cannot run a good school paper; neither can lazy cleverness. A journal that is worth a “gentleman’s mark of C” is not worth a dollar a year. The realization of this blunt truth, through the effective discipline of his co-editors, has been the making of more than one boy who was content to slide through school on his wits. And for the school at large the paper does as much or more. It stimulates and vitalizes composition work; it distributes news; it keeps a permanent record not only of events, but of legislation, such as the charters of various societies; it stimulates the activity of these societies, by their anticipation of “what the paper will say”; it binds alumni to the school; and, if conducted with frankness and public spirit, it often reveals to the principal tendencies in student thought and opinion that are worth his consideration and may help to shape his policies.

To make the discussion of this belief definite and practical, let me outline the organization of the paper published by the Horace Mann High School; not that it is necessarily worthy of imitation, but that, being a growing organism, the outcome of eight years of experiment, it is illustrative of actual conditions, and not of mere theory. Other papers have a more complex system; for instance, I understand that one of the Indianapolis high schools issues a daily paper, printed by the pupils, and edited by a different board for each day of the week. Local

opportunities or interests will determine the plan to be followed; the following one will show most of the difficulties to be met, and many of the results to be hoped for.

The *Horace Mann Record* includes in one subscription price, and under one board of editors, two papers: a quarterly magazine, and a bi-weekly news bulletin. These were formerly, as in most schools, united in a single monthly; but under that arrangement the news got cold before it reached its public. The issue of a separate news sheet put new life into the paper; it became a live influence in the school, especially under the guidance of a teacher who was in close relations with one of the big city dailies. Meantime the literary section, issued quarterly, gained in size and dignity, as it could be prepared with more deliberate care in the selection of material. The vital connection between the two papers is maintained largely for financial reasons: a school, unless very large, will not easily support two papers, and the literary one, valuable as it is, would appeal to the smaller public and so go to the wall.

I have before me the first two issues, for the year, of the news bulletin. In form it is a four-page sheet, resembling the college dailies. It has twelve nine-inch columns, made up substantially in this proportion: (issue of October 12) athletics, $1\frac{1}{2}$ col.; graduation festivities, 1; faculty changes, 1; alumni, 2; school chat, 1; various news items, $3\frac{1}{2}$; editorials, $1\frac{1}{2}$; advertisements, $\frac{1}{2}$; (issue of October 26) athletics, 3; alumni, 1; school chat, 1; editorials, 2; advertisements, $\frac{3}{4}$; and the rest scattering. A little fuller inspection shows that advertisements are too scanty, but are coming up; that the accounts of games are intelligently written, analyzing the significant plays so that one who did not see the game can get a clear idea of the merits of the teams; that the two alumni lists contain 103 names, and cover 28 colleges and other institutions of learning, as well as the business world, marriages, and varia; that the news items cover a wide field: the report of the girls who went to the Silver Bay Conference, the organization of the Dramatic Club, the doings of the Elementary School, a discussion of the honor system, of the new athletic field, of the visit of some distinguished Japanese,

etc. The editorials are incisive without being pert: a plea—on ingenious grounds—for a holiday, an appeal to the students to assist officials in keeping order at games, a sharp attack on the lunch-room management, etc. A significant point is that a critic, even if inclined to be hostile, would find nothing to attack as silly or cheap or “yellow,” because the editors, even if disposed to use such matter, would find it crowded out by real live news.

The quarterly has not yet appeared; but I shall expect in it a corresponding range of interests on the literary and artistic side.

The organization of this journal is rather complex; indeed, a city editor of a big New York paper said, on looking over the names of the board, “It seems to take more people to get out your paper than to make a city daily.” This complexity, however, is not objectionable, as the benefit of editorial training can be the more widely extended.

The business management, being at the basis of everything, should be described first. The two business managers (with their assistant, who is qualifying for a full position next year) have two main problems: advertisements and subscriptions. They have to raise, say, six or eight hundred dollars; until they have this actually in sight, the editor-in-chief will not know how big a paper he can print, how many issues, or what illustrations he can have. Immediately on their appointment in the spring they must begin a canvass for subscriptions, especially in the outgoing Senior class. When school reopens, they must organize a corps of agents to solicit subscriptions and to deliver papers; they must devise a checking system, to make sure that each subscriber, especially each one on the mailing list, receives his copy. On the side of advertising, they must prepare rate-sheets and contract-blanks; interview all possible advertisers, approaching them with that well-bred persistency that will secure the contract—no small task, in view of the fact that school advertisements do not at best bring the advertiser very large returns; they must be sure, also, that the terms of the contract are strictly carried out, and in case of mistakes, must give the advertiser satisfaction. They must pay all authorized bills, carefully keeping vouchers.

They must keep accurate books, and be prepared at any time to report on the financial standing and outlook of the paper. If there is a surplus from preceding years, they must invest it wisely, and if possible add to it. Finally, they must for their own protection submit, before going out of office, all their accounts and vouchers to some authorized examination. Their task is no sinecure—neither is it without its reward. One former business manager recently told me, with conviction in his voice, "I owe my success in business to my experience on the *Record*."

The news bulletin is in charge of a "bulletin editor" and his (or her) staff: a Senior, a Junior, and an elementary news editor, reporters for their respective grades of the school; an athletic editor, and an alumni editor. The bulletin editor keeps (on a blackboard in the sanctum) a list of assignments to these reporters, each of whom is responsible for his assignment and as much more, within his field, as he can gather. Big "feature stories" the bulletin editor may himself cover; but his chief function is to make assignments, to edit the reports, to write, in collaboration with the editor-in-chief, the editorials, to paste up the dummy, write headlines, and read proof. Of his assistants, the athletic editor must be really athletic, understanding the games; his accounts must not be literary impressions of the various sports, but facts, detailed by an expert. If the choice for this position lay between a good athlete who could not write and a good writer who could not play ball, I should appoint the athlete, and let somebody rewrite his "stories." He or his deputies must cover every athletic event, not merely the crucial games of the first team. If there are girls' teams, some girl on the staff must cover them. Expenses to out-of-town games are usually paid by the paper.

The alumni editor has perhaps the hardest task of any, because the alumni will escape beyond his reach. Wide acquaintance, real interest, unremitting perseverance, and a conscience for the exact fact are needed, to build up a good column. Without these, no system will work. An editor among the alumni will be enthusiastic at first, but will be apt to cool; and the paper cannot keep in touch with him. The same is apt to be true of

corresponding editors in the several colleges. There must be an active editor in the school, who keeps a notebook constantly with him and lives only to learn about alumni—from themselves, from the teachers, the principal, the college or city press. Such a boy recently undertook to make a card-catalogue of all the alumni of the school, entering under each graduate's name whatever the *Record* had ever printed about him. This file, always accessible to interested persons, will in time come to be a most effective bond between the alumni and the school.

Turning to the literary quarterly, we are at once confronted with the problem of where to get stories. This is the problem of the literary editor, who is most likely to be a girl. She need not be the best writer in the school—particularly if the best writer is high-strung and supersensitive, separated by her artistic gift from the sympathy of her mates. Such a girl makes a poor critic, unduly severe in her standards, and will discourage writers whose line happens to be different from hers. It is better to have a girl of evenly developed capabilities, sound common sense, and a wide circle of acquaintance; it goes without saying that her common sense should be sufficiently uncommon to enable her to recognize an unusual bit of writing when she sees it. She will cultivate the able writers of all classes, discovering new authors when she can, coming back to the old faithfuls when she must—able, as a last resort, to fill in with a good story of her own. I tabulated once, for the board, the work of the preceding editors for five years back, and we agreed that the one who had done most for the paper, on the literary side, was a girl who had printed practically nothing of her own, but had discovered a large number of young writers, both girls and boys. It was not surprising that this girl, on entering college, was sought out for all sorts of editorial and executive positions. The hardest problem in this department is the occasional outbreak of plagiarism. We have once or twice had to deal with a writer, usually of some little literary talent and ambition, who took a short cut to fame by sending in a story stolen from some professional magazine. A new board of editors should be warned of this possibility, and be ready, if so imposed on, to mete out

to the aspirant for fame the kind of penalty that would be due to the same kind of dishonesty on the ball field.

The position of art editor is hard to fill; at the high-school age, artistic talent is largely untrained, often highly developed in a single direction, but skittish and unreliable. The best caricaturist in the school perhaps cannot draw a tolerable tail-piece; the girl who does the most charmingly balanced designs cannot make them interesting to her public. The artist may wait so long for inspiration that the paper goes to press unillustrated. But these same highly individualized people may be saved from future failure by the immediate necessity of harnessing their artistic temperament to serve a useful end. The caricaturist may have recourse to the art teacher, and the designer may get vitalizing contact with more lively folk, and both may learn to command their talent, rather than wait for it to command them.

The exchange column appears to be a fixture in school papers, and often an amusing one. The *Record* exchanges with sixty or seventy magazines, the reading of which, for editorial comment, develops not a little breadth of view and critical acumen. Occasionally a duel of wit will take place between rival papers; one of our more daring editors once even ventured to assail a dignified college monthly. There is danger, naturally, that the criticism will become verbose or "smart"; it is sure to, if the editor thinks too highly of his own wit. But a level-headed, bright boy or girl, not blinded by conceit or prejudice, can often learn much, and teach other editors much, through the exchange column. Some years ago our exchange editor conducted a lively discussion with an English schoolboy editor on the spirit and methods of school journalism here and in England. The English boy commented on the professionalism of American school papers; their attempt to compete with regular magazines in their fiction; the unblushing assurance that led our boys to be willing to print their names; and the superior hold the English paper had on its alumni. The American editor answered, defending our fiction as more vital, even if less learned, than the English "essays," and attributing the willingness of our boys to print their names to a

manly feeling of pride and responsibility. The English editor answered in his forthcoming number; and the American boy finally summarized the whole discussion, with an unbiased appreciation of the merits of both sides of the controversy that did credit both to his fairness and to his keenness of mind.

All these activities center in the editor-in-chief. He will have little to write, aside from the leading editorials; but much to do, in assigning duties to others, and in following them up: always ready to lend a hand, to appoint an assistant or a substitute, or to do whatever may be necessary to insure the appearance, on time, of a creditable paper. He represents the paper officially, in its relation with the school authorities; he makes arrangements with the printer; he decides all matters of executive detail; he is responsible for the prompt appearance of the paper, and for its contents; and he will call meetings, at stated intervals, to discuss the policy of the paper and to go critically over the numbers as issued. He should be able, popular, and reliable; a worthy leader. He should not be one of those milk-and-water boys who always do what they are told; one of the best editors we ever had was a silent, hard-headed Scot who opposed, at times, a will of iron to certain ideas of the advisory teacher. But his will was based on good judgment and high ideals so that in spite of occasional differences the teacher and the editor grew to have for each other a strong respect and loyal friendship, under which the paper thrived. A girl, as a rule, does not make a good editor-in-chief, in a co-educational school; she can with difficulty command an adequate following. Boys are sensitive about working under a girl, however great her ability; and they will not give her their hearty support.

These various editors may be selected by election, by competition, or by promotion. The retiring board should by one or all of these methods appoint their successors, and then break them in by having them make the last number of the paper, under direction. All three methods of choice are open to objection; my own decision would be in favor of election of the chief, whose personal qualities count for so much, and appointment of

the others through promotion of the most efficient, subject to open competition from other candidates. Every effort should be made to guard against favoritism, particularly "fraternity pull"; when this creeps in, it means the office is being sought as a trophy, not as an opportunity, and the result will be disaster. To guard against this, there should be a rule of the board that a sufficiently large majority can demand the resignation of any member, even the chief, on grounds of inefficiency or neglect.

From the regular activities of an enterprising board will spring new ones to meet changing conditions from year to year. I have spoken of the card catalogue run by the alumni editor. Other editors may start the useful habit of posting daily news bulletins; may make, and sell in the name of the paper, photographs of school teams or dramatic casts; or may open the sanctum for the sale of tickets to games or other entertainments. After the lapse of ten years or more, it will be quite possible to reprint, from the school paper, books of short stories or of school verse or illustrations. In co-operation with class secretaries, the paper might issue special news sheets for the quinquennial reunions of classes. One feature of our organization, a club of all present and past editors, has grown from a very informal candy-pull in a private home, to a considerable supper given annually by the board to all of their predecessors who can be reached. They come back, sometimes twenty or more, from the business world, from college, at considerable inconvenience, and give the younger editors their friendship, their advice, and best of all, the stimulus of their success; for these graduates have gone on and become college or, in some cases, professional editors; college debaters; officers of their classes; artists of promise—successful young men and women in many walks of life. Their annual return means much to the students; it means much to the teachers who were associated with them in their early attempts to make a good school paper.

And what of the teacher adviser? The complexity of a highly original paper demands, in the first place, the services of some one person permanent for a term of at least three years,

who will be a conservator of such practices as have been found wise. The office should not be retained too long; the paper needs the vivifying influence of new blood, and other teachers have something to gain by experience on the paper. The man or woman (preferably, each in turn) who takes this office should be the helpful friend, resourceful, ready with advice when wanted, familiar with the paper's past and ambitious for its future. Two things he should not be: one is a censor, the other is an editor-in-chief. Censorship is rarely, if ever, necessary. The kind of objectionable matter occasionally written for a school paper grows out of momentary thoughtlessness or a bit of unconsidered humor, and is set right at once by a tactful suggestion. But the tacit, though unacknowledged, assumption of editorial powers is a real temptation to an interested teacher; he will grow to love the paper and to want to be an increasingly strong force in determining its policy. Nothing could be more surely fatal; the student body are quick to detect the voice of Jacob, no matter if the hairy hand of Esau signs the editorial. They are even ready to imagine dictation from a teacher where it does not exist. And the moment they think that discussion in the columns of their paper is not free, the paper loses their respect, and is no longer a power in the school. The teacher adviser should tell his editors *how*, and not *what*, to write. If he is the right sort, and is on terms of friendly familiarity with his board, his influence will permeate the board so that they will work for whatever is their conception of the best interests of the paper and the school. If in the pursuit of these ideals they go in some direction that seems to the teacher unwise, he must firmly refrain from interfering: only by freedom can they become strong; only by their mistakes can they learn the right; and from my own experience, I surmise the teacher may have something to learn, too.

THE ILLINOIS EDUCATIONAL COMMISSION

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At the meeting of the Illinois State Teachers' Association in December, 1907, a resolution was passed urging the General Assembly to authorize the appointment of a commission to investigate the organization of the public-school system of the state and to report its findings and its recommendations to the next Assembly. This resolution was strongly indorsed by Governor Deneen in his message to the Forty-fifth General Assembly, and resulted in an act which empowered the governor to appoint an educational commission to consist of six persons representing the various phases of educational work within the state. The Act provided that the state superintendent of public instruction should be chairman *ex officio* of the commission, and also that the commission should elect a secretary. The following members were appointed by the governor in December, 1908: President E. J. James of the University of Illinois, President R. E. Hieronymus of Eureka College, President Alfred Bayliss of the Western State Normal School, Superintendent Edwin G. Cooley of Chicago, Superintendent A. F. Nightingale of Cook County, and Principal Harry Taylor of the Harrisburg Township High School. Professor Ira Woods Howerth of the University of Chicago was elected secretary of the commission.

The amount of work which the commission accomplished during the ensuing year is indicated by the seven bulletins¹ which record the data collected and embody the recommendations to the Assembly.

¹ The Illinois Educational Commission, Springfield, Illinois, 1908-1909: Bulletin No. 1, *A Tentative Plan for a State Board of Education*; Bulletin No. 2, *The County Superintendency*; Bulletin No. 3, *A Tentative Plan for the Certification of Teachers*; Bulletin No. 4, *A Tentative Plan for Making the Township the Unit of School Organization*; Bulletin No. 5, *Tentative Recommendations concerning County Teachers' Institutes*; Bulletin No. 6, *The General School Law of Illinois as Revised, Simplified, Condensed, and Codified by the Illinois Educational Commission*; Bulletin No. 7, *Tentative Recommendations in Regard to Minimum Salaries for Teachers*.

In order to appreciate the true significance of this work it is essential to understand the unique and, one might almost say, anomalous condition of educational organization in Illinois. The adjective *decentralized* only inadequately characterizes this condition. The "district" unit of the northern states and the "county" unit of the southern states are curiously combined with the "township" unit so as to form, not a unified school system in any sense of the term, but rather an unwieldy collection of independent elements. At basis, the "organization" may be said to follow the "district" plan. Each district has its own board of directors, which controls and manages the schools within the district; but the township board may divide or consolidate districts upon petition of the voters. The county, through the county superintendent, has come to exercise a supervisory function in connection with the districts within its borders, and the delegation of the certificating power to the county superintendent makes this supervision peculiarly effective. Finally, through the superintendent of public instruction the state exercises a general supervisory function over all schools, but the powers of this officer are closely restricted, and consequently the directive influence which the corresponding official can exert in a centralized system is little felt in the schools of Illinois.

The commission maintained from the outset that its chief function was to remedy this condition—to bring some measure of system and order into the educational machinery of the state. Bulletin No. 1, *A Tentative Plan for a State Board of Education*, is the result of its first effort in this direction.

Illinois has no state board of education, nor does the office of the state superintendent of public instruction fulfil the functions which such a board fulfils in most states. The commission recommended a board of nine members, eight of whom were to be appointed by the governor, the state superintendent of public instruction, and the chief justice of the supreme court; the ninth member being the state superintendent himself, who was to act as *ex officio* chairman of the board. The eight members were to serve for eight years, and were to be intrusted with the following powers:

1. To have general supervision and inspection of the public schools, including the educational departments of the state charitable and reformatory institutions.

2. To make rules for the distribution of any part of the state school fund set aside to assist and encourage schools.

3. To prepare and distribute plans and specifications for the construction and equipment of schools.

4. To prepare all questions for teachers' examinations, to grade all examination papers, and to prescribe all rules and regulations necessary to carry into effect the provisions of the law in regard to the certification of teachers.

5. To propose plans for organizing and conducting institutes.

6. To prescribe rules and regulations for the sanitary inspection of school buildings, and for the examination of pupils in order to detect contagious and infectious diseases and physical defects, and to take such other action as may seem necessary and expedient to promote the physical welfare of school children.

7. To classify and standardize the public schools and colleges, to provide for new forms of educational effort, and in general to take such action as may seem necessary to promote the organization and increase the efficiency of the educational system of the state.

It will be noted that two especially important and effective functions were to be fulfilled by this proposed board: first, the function of distributing the school fund, and second, the function of examining teachers. The remaining functions were largely of an advisory character, but it is clear that the advice given by a board that distributes the school fund and virtually certifies all teachers becomes effectually prescriptive. Without these two powers the proposed board would have been quite without effective influence over the schools which it was supposed to supervise. It was undoubtedly the teachers' examination clause that led to the defeat of the bill in which the recommendations of the commission were embodied.

Bulletin No. 2 proposes some needed reforms in the county superintendency. At the present time the county superintendency is the most influential educational agency in the state, and yet the office is safeguarded by absolutely no legal qualifications in respect of scholarship or professional training. As the commission points out, it is, to say the least, inconsistent to prescribe definite qualifications for the certifying of

teachers and still make no provision for similar or greater qualifications in the examining and certificating officer. The commission proposed that no one should be eligible to the position of county superintendent who did not hold at least a state supervisory certificate. It also recommended strongly the organization of county boards of education, which should bear the same relation to the county superintendents as the proposed state board of education would bear to the state superintendent of public instruction. At the present time each county superintendent prepares the questions for his own examinations, grades the papers, and issues the certificates.

The commission elaborated its recommendations regarding the certification of teachers in Bulletin No. 3. It proposed an equitable division of responsibility among the county superintendents, the state superintendent, and the state board of education. County certificates were to be issued by the county superintendents, and these officials were empowered to revoke certificates for cause. A similar power was proposed for the state superintendent with regard to state certificates. The state board of education, however, was to prepare all questions, grade all papers, fix a uniform date for county examinations, and determine the time and place for state examinations. It should be remarked in passing that all teachers in the public schools of Illinois under the existing law as well as under the proposed plan are licensed only by examination, neither normal-school nor university diplomas exempting the candidates from such examinations.

The certification plan proposed by the commission was well adapted to insure the caution essential in licensing teachers and at the same time prevent real teaching talent from becoming ineffective through an overplus of "red tape." Four classes of county certificates were proposed: elementary, high-school, kindergarten, and special. Elementary certificates were to be of first, second, and third grade, varying with the experience, academic preparation, and professional training of the applicant, and valid for three years, two years, and one year respectively. It was further proposed that the third-grade certificate should

not be issued after July 1, 1913; this provision would have made it impossible after that date for anyone to obtain a certificate to teach in the schools of Illinois without the equivalent of a high-school education. High-school certificates were to be of two types, one valid for one year, and the other for three years. All were to be renewable under certain conditions and for limited periods, and all except the third-grade, the elementary, and the limited high-school were to be transferable from county to county upon the indorsement of the county superintendent.

The state certificates were to be a life elementary, a life high-school, and a supervisory. The life elementary certificate was to be granted only to normal-school graduates upon examination, and after three years' teaching on a first-grade elementary certificate. The high-school certificate was to be granted only to college and university graduates under similar conditions. Supervisory certificates were to be issued in two grades, varying with experience and professional training, the second-grade valid for five years, and the first-grade valid for life, with the provision, however, that the latter should lapse after three years if the holder ceased to engage in educational work.

Another of the commission's bulletins (No. 5) is likewise of general value. This embodies the findings and recommendations relative to teachers' institutes. At the present time the state supervision of teachers' institutes in Illinois is merely nominal, the state superintendent of public instruction being empowered simply to indorse the institute instructors who are employed by the county superintendents. Attendance upon the institutes is not compulsory, and there is no law compelling districts to pay teachers while in attendance, except when the institutes are held during the regular school year. The commission did not propose to relieve the county superintendents of the responsibility for the conduct of the institutes, but it did recommend that a state institute director be employed to assist the superintendents in organizing and conducting institutes, to prepare courses of instruction, and to devise general

plans for increasing the economy and efficiency of the work. It also recommended that institutes be held within the school year instead of during the summer vacation, as is now almost invariably the rule in Illinois. Attendance, it urged, should be made compulsory and should entitle the teacher to full pay during the institute period, this part of the expense of the institutes being borne by the districts employing the teachers. The salaries of the instructors and the general expenses involved, however, should be met by a grant from the state of \$300 for each county, any further expenditure being borne by the county itself. In order to insure a uniformly high grade of instruction for all institutes, the Commission recommended that a list of approved instructors should be prepared by the state superintendent, from which the county superintendents should select the instructors desired for each institute.

In Bulletin No. 4 the commission recommended the adoption of the township unit of school organization, urging the enactment of an amendment which would place schools in districts not governed by boards of education (that is, in districts not in town and city systems) under the control of township boards of trustees. The analysis of the data gathered from various parts of the country and the admirable presentation of the arguments for and against the various units of school organization make Bulletin No. 4 an educational document of much more than local significance.

Probably the most important work of the commission—certainly the most effective work—is the codification of the school law of Illinois, which is embodied in Bulletin No. 6. Governor Deneen, in urging the appointment of the commission, had characterized the school law of Illinois as so cumbersome and contradictory in its provisions that no lawyer, not to say layman, could pretend to know and understand it. The commission deserves the highest praise for the skill with which it reduced this legal entanglement to system and order without altering the meaning or omitting an essential feature of the original enactments. In view of the failure of the Assembly to act favorably upon most of the recommendations,

it is gratifying to know that at least this codification will stand as a monument to the labors of the commission.

Bulletin No. 7 deals with the question of teachers' salaries. After a brief summary of statistics and review of the minimum-salary legislation of other states, the commission recommended (1) that the minimum school year be increased from six months to seven, with full allowance to teachers for legal holidays and time spent in attendance upon institutes; and (2) the adoption of a minimum-salary schedule providing that the wages of teachers holding second-grade certificates should be at least \$45 a month, or \$315 a year, and of teachers holding first-grade certificates, \$55 a month, or \$385 a year. A further clause was also recommended providing for state aid to townships which could not, after levying the maximum school tax permitted by law, pay the minimum salaries and maintain their schools for the required terms.

That the commission felt that it was building for the future rather than preparing for the immediate institution of all its proposed reforms is evinced by the fact that it proposed only three bills for action by the forty-sixth General Assembly. These bills embodied its recommendations with regard (1) to the establishment of a state board of education, (2) to the certification of teachers, and (3) to the township organization of rural schools. It is a matter of regret that none of these bills became law.

It is gratifying to note, however, that the labors of the commission were not in vain. Aside from the codification of the school law (in itself a noteworthy achievement), the general discussion of the various questions involved showed that the people of the state had been reached and interested. The inadequacies of the existing school situation were made known in a wider circle than would otherwise have been possible, for the conservative forces were compelled to come out from behind the bulwarks of tradition and fight in the open.

The commission will be continued and its proposals will be revised and presented to the next General Assembly.

SUGGESTIONS FOR A PRACTICAL COURSE IN HIGH-SCHOOL BOTANY

GEORGE A. WORKS

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High-school science courses should be so organized with reference to content that they will meet the needs of the pupil in ordinary life rather than in advanced study. High-school teachers should realize that they must break away from tradition and college-entrance requirements, so far as these are restraining factors, and organize a body of knowledge that shall have as its purpose the study of common things in order that the pupil may live more efficiently. The opposition of higher educational institutions to such a development is rapidly disappearing. Today some of the pronounced advocates of the reorganization of high-school science courses are eminent teachers of science in colleges and universities. Among these are such men as Professor C. R. Mann, Professor O. W. Caldwell, and Professor J. F. Woodhull. It seems settled that diluted college science is not what should be given the average boy or girl as a preparation for life. Indeed, there is a growing belief that it is not the best thing even for the pupil who goes on to advanced work.

There is no inherent reason why an "applicable" course in any high-school science should be a "soft" course. The fact that any phase of a subject is practical does not prevent it from demanding serious study. In fact, the hardest and most absorbing work on the part of high-school pupils that it has ever been the privilege of the writer to witness has been done in connection with the practical phases of their science work.¹

All students should carry away from a high-school course in botany an intelligent interest in plant life and an apprecia-

¹ The course in applied chemistry given in the Menomonie High School was described by Mr. Works in the *School Review* for October, 1910, pp. 560-64.

tion of some of the many important ways in which it touches their own daily lives. Several years of experience in elementary science teaching with pupils who were high-school graduates convinced me that this is not ordinarily the case.

With the foregoing ideas more or less clearly defined, a definite attempt has been made in the Menomonie High School to develop a course of botany in which particular stress is laid upon the economic phases. The work as administered in the past has covered a period of twenty-four weeks and has been required in all courses. As is the custom in most schools in Wisconsin, the subject comes in the second year of the high school, so that the pupils range from fourteen to sixteen years of age.

The following outline will give an idea of the principle economic phases upon which stress is laid. Within the limits of this article it is, of course, impossible to cover the course in detail. The rather detailed outline on bacteria will give a general idea of how the other subjects are treated.

Three to four weeks are devoted to the work in elementary bacteriology. This part of the course has been found helpful, giving pupils an intelligent attitude toward many of the problems of home and public sanitation. By this elementary study of bacteria the foundation can be laid for rational co-operation with health authorities with reference to public sanitation and infectious and communicable diseases.

The following topics receive consideration: occurrence, structure, reproduction, conditions favorable for growth, and some results of growth. Experimental work is used to illustrate as many of the topics as possible. Some of the experiments that have proved very satisfactory with our pupils are the hay infusion experiments, tests to show the presence of bacteria in the air under varying conditions, to detect them in water and milk and on the body, and to show conditions favorable for growth. Sterilization and disinfection are illustrated. This work is followed by a study of the economic importance of bacteria in the household and on the farm, and, necessarily in an elementary way, of their relation to disease. The "pure" phases of the

subject are determined largely by the practical applications that are to follow. Throughout the course care is taken not to lead the pupil blindly to the applications. In presenting this work and throughout the course the compound microscope is used when it will contribute to the intelligence with which the pupil works. If the use of the instrument degenerates into abuse it is because of lack of judgment on the part of the teacher.

Because of local conditions a study is made of blue green algae in their relation to pollution of water supply. The water for Menomonie is drawn from a small lake near the city, and abundance of illustrative material may be obtained by straining the water as it flows from a tap in the laboratory. The study of the structure of the water system together with a consideration of the conditions favorable for the growth of blue greens and the knowledge the pupils already have of bacteria puts them in a position to understand the danger of using the water. Methods of treating such water so that it may be used for drinking purposes without danger are taught.

The method of treatment of yeasts resembles materially that described for bacteria. The usefulness of the yeasts is sufficient to justify a somewhat detailed consideration.

The fungi offer such an abundance of material that care has to be exercised in the selection. The forms which we have found best adapted to our purposes are the following:

1. The blights are approached through a study of lilac blight. Material is easy to obtain and is sufficiently large to be handled in a satisfactory manner. A study of the life history of this form puts the pupil in a position to understand the significance of the spraying of fruit trees.

2. *Mucor* serves as a basis of the work with the molds that are of importance in the household. The study of the life history and conditions favorable for growth and reproduction enables the pupil to appreciate intelligently the means of preserving our food from the action of molds by drying, use of chemical preservatives, low temperature, and high temperature followed by hermetical sealing.

3. A careful study is made of the smuts and rusts of grains.

A method of treatment similar to that indicated for blights serves as a basis for a discussion of the methods of treating grain smut. The attention of the students is directed to the efforts that are being made to develop rust-resistant grains.

4. A brief study of the higher fungi is made and the economic importance of the bracket fungi and the mushrooms is brought out.

In the study of flowering plants the practical phases are made prominent throughout the work. The study of seeds naturally leads to seed testing and selection and to the study of food materials derived from a few typical grains. In connection with seed and fruit distribution use is made of the excellent opportunity that occurs for study of noxious weeds. This subject is supplemented in connection with the work on underground stems.

Some of the important commercial products derived from stems, such as turpentine, resin, camphor, and rubber receive attention at the time the study is made of the stem. Careful study of the practical applications in agriculture and horticulture are made in connection with such topics as grafting, transplanting, trimming, and proper methods of treating tree injuries. At all times the paramount idea is to have the pupil understand enough of the botany to comprehend and appreciate the practical side of the work.

In addition to the economic phases that are considered in connection with the regular work of the subject a few topics are considered of sufficient importance to justify separate consideration. This list includes an intensive study of a few farm plants, such as the potato, corn, and one of the small grains; elementary forestry; and plant breeding.

The work has been carried out most satisfactorily when the recitation, laboratory, and field work were supplemented with talks by the instructor which served as a preparation for the student when a new topic was taken up. Liberal use is made of bulletins from the United States Department of Agriculture and from the state experimental stations. These bulletins have proved to be extremely valuable.

Botany perhaps more than any other high-school science has

suffered from an over-burden of scientific terms. Teachers have often deceived themselves by thinking pupils were making real progress in the subject because they were learning new terms. They have mistaken the shadow for the substance. Often a pupil may learn the term without mastering the idea. Pupils should not be allowed to grope about using bungling expressions because of lack of proper technical terms: every scientific term essential for progress should be mastered. But we have found that it is possible to reduce greatly the number of terms that are used in the ordinary text in botany. This together with the use of English words or compounds instead of foreign derivatives has materially simplified the terminology.

With the teacher well prepared for the subject it seems to be a matter of minor importance as to just how the approach to the subject is made. The statement of Professor John M. Coulter seems very fair:

The prepared teacher also means the ability to attack the subject in a variety of ways. There is no ideal method of first attack, for it may well vary, dependent upon many circumstances. Botany is like a great park, whose approaches are numerous. The most natural one to use is the one that happens to be most convenient at the time, the one nearest to the pupils. This means considerable grasp of material and great flexibility in presentation. A teacher who only knows one way is singularly handicapped. The principle just stated convinces me that it would be very unfortunate for any committee to assume to determine that some one method of approach is the best. This is to be determined by the competent teacher, whose special problem it is. It is certainly a waste of time to answer such a question for the incompetent teacher. The final application of power must be made by the teacher, and anything that encourages initiative in this respect is so much clear gain.

The prepared teacher also means the disappearance of the well-worn excuse of difficulty in reference to any approach. Every approach is easy for him who knows the way; and to those who are under competent guidance every approach is equally easy. I have used every group of plants and every aspect of plants as the initial point of attack, and I have found them all equally easy to pupils, and I have also found pupils equally ignorant of all of them. The excuse of difficulty always means the unprepared teacher. Botany is never difficult when taught by the prepared teacher; it is always difficult and futile when taught by one who is unprepared.²

² Cf. John M. Coulter, "Botany," *School Science and Mathematics*, IX (April, 1909), 362-67.

Frequently the statement is made that practical courses in the high-school sciences are lacking in balance. For two reasons I do not care to defend this course against such a charge, (1) We have attempted more in most high-school courses in botany, I believe, than it was possible for students to handle in a satisfactory manner. We have not been able to furnish a motive for much that we have attempted in the subject and have left our pupils bewildered and without an abiding interest in a very important subject. (2) Our course has been developed to meet the needs of pupils living in a distinctly rural community and attending an institution in which all pupils are required to take at least two years of industrial work. This makes possible some correlations that might not be possible in every school.

QUALITATIVE ELIMINATION FROM HIGH SCHOOLS

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How do pupils who leave the high schools before completing the course compare in class standing with those who continue until graduation? In other words, is there a distinct qualitative difference between the pupils whom the high schools graduate and those whom they eliminate?

Dr. W. F. Dearborn found upon investigating the facts in two cities in Wisconsin¹ that the high-school graduates were not a highly selected group of students, but rather of average ability. But it is a well-known fact that popular opinion holds usually the opposite view.

Four other questions, analytical phases of the main problem, present themselves for consideration: (1) Does the quality of elimination vary in the different years of the high-school course? (2) Does one subject in the curriculum more than another influence elimination? (3) Is the elimination of boys from the high school qualitatively different from the elimination of girls? (4) Do the same qualitative tendencies appear in the high schools of different cities?

In approaching this problem we may assume that the grades given to a pupil by his teachers constitute a measure of that pupil's ability to do the work which the school prescribes. This assumption gives us the basis for qualitative comparisons. Accordingly I have taken the recorded annual grades in English, mathematics, history, and foreign languages of nearly five thou-

¹ See *Elementary School Teacher*, September, 1909. Dr. Dearborn found in the schools which he investigated (1) that fully a third of the pupils who reached the high school had been inferior pupils in the grades; (2) that fully a third of the pupils who dropped out of the high school had ranked in the upper half of their classes in the high school; (3) but that scholarship had a very definite relation to elimination from the university; (4) and that the subject of English influenced elimination more than mathematics did.

sand pupils who entered high school in September, 1905. The total number of such grades used in this study is 18,926.

There were twelve Chicago high schools included in this study: the Austin, Calumet, Englewood, Hyde Park, Jefferson, Lake, McKinley, Marshall, Medill, South Chicago, Tuley, and Waller. In addition to these I have similar statistics from the Central High School of Kansas City, Missouri, and from the three smaller high schools in Boonville, Missouri, Bloomington, Indiana, and Hartford City, Indiana.² The data for the Chicago schools are given in Tables I and II, and for the other schools in Table III.

For convenience all grades are distributed into five groups, designated as I, II, III, IV, and V, beginning with the highest. This means that in Chicago, for example, all grades of 90 or above fall into group I; 85 to 89 inclusive, group II; 80 to 84 inclusive, group III; 75 to 79 inclusive, group IV; and all grades below 75, which is the minimum passing mark in Chicago schools, constitute group V.

The grades of the graduates are taken for each of the four years separately. The graduates are compared, according to their work each year, with those of their classmates eliminated during or at the close of that year or too early in the succeeding year to leave a recorded grade. Pupils who left by transfer to some other school, if the fact was so recorded, are not counted in either class. For the three small high schools and for the Kansas City high school the numbers of the graduates and of the persons eliminated each year are tabulated according to their standing in each subject during each of the four years, the figures for boys and for girls being presented separately (Table III). For the twelve Chicago high schools, where many more pupils are involved and the percentages consequently more significant, the distribution of the graduates and the persons eliminated each year is given for boys and girls separately and also for both combined, and in addition the percentage of elimination is given in each case (Table I). The basis of this percentage,

² For the data outside of Chicago I am indebted to the generous co-operation of Superintendents J. M. Greenwood, M. A. O'Rear, H. L. Smith, and W. A. Myers.

TABLE I

SHOWING, FOR TWELVE CHICAGO HIGH SCHOOLS, THE DISTRIBUTION OF THE PUPILS WHO ENTERED IN SEPTEMBER, 1903, AND WERE GRADUATED IN JUNE, 1909, AND OF THEIR CLASSMATES WHO WERE ELIMINATED EACH YEAR, ACCORDING TO THE GRADES OF THAT YEAR'S WORK: WITH THE PERCENTAGE OF ELIMINATION, COMPUTED ON THE BASIS OF THE NUMBER ELIMINATED IN THE YEAR IN QUESTION TOGETHER WITH THE NUMBER GRADUATED IN JUNE, 1909

	FIRST YEAR						SECOND YEAR						THIRD YEAR						FOURTH YEAR																		
	Boys			Girls			Total			Boys			Girls			Total			Boys			Girls			Total												
	Eliminated		Percentage of Elimination	Eliminated		Percentage of Elimination	Eliminated		Percentage of Elimination	Eliminated		Percentage of Elimination	Eliminated		Percentage of Elimination	Eliminated		Percentage of Elimination	Eliminated		Percentage of Elimination	Eliminated		Percentage of Elimination	Eliminated		Percentage of Elimination										
	Graduated	Eliminated		Graduated	Eliminated		Graduated	Eliminated		Graduated	Eliminated		Graduated	Eliminated		Graduated	Eliminated		Graduated	Eliminated		Graduated	Eliminated		Graduated	Eliminated		Graduated	Eliminated	Graduated	Eliminated	Graduated	Eliminated				
English	45	11	20.122	59	33	167	70	30	44	5	10	04	21	18	138	26	16	31	4	11	59	3	3	90	7	7	39	0	0	82	4	5	121	4	3		
I.....	61	34	36.141	114	45	202	148	42	54	9	14	128	48	27	182	57	24	70	10	12	137	15	10	207	25	11	45	1	2	113	5	4	158	6	4		
II.....	82	72	47.103	193	65	185	265	59	73	25	26	141	95	40	214	120	36	82	13	13	155	28	15	237	41	15	85	11	11	157	20	1	242	31	11		
III.....	59	150	73	65	241	79	121	391	76	79	56	41	99	117	54	178	173	49	80	35	30	118	57	33	198	92	32	88	20	19	131	28	18	219	48	18	
IV.....	3	121	98	3	136	98	6	257	98	2	42	95	5	69	93	7	111	94	3	26	90	9	22	71	12	48	80	2	16	89	0	17	100	2	33	94	4
V.....	247	388	61.434	743	63	681	1,131	62	252	137	35	467	350	437	719	487	40	266	88	25	478	125	21	744	213	22	259	48	16	483	74	13	742	122	14		
Total...	84	24	22.129	60	35	213	93	30	63	4	6	72	17	10	135	21	13	39	6	13	21	0	0	60	6	9	42	1	2	16	2	11	58	3	5		
Mathematics	59	45	43.106	88	45	165	33	45	56	10	15	66	31	32	122	41	26	30	2	6	16	1	6	46	3	6	25	5	17	14	0	39	5	3			
I.....	44	54	55	93	127	60	137	181	57	48	19	28	38	34	121	57	32	38	7	15	22	2	8	60	9	13	25	1	4	15	1	8	40	2	17		
II.....	50	115	70	97	179	65	147	294	67	61	32	34	99	49	33	160	81	34	44	14	24	30	9	23	74	23	24	32	5	4	20	6	23	52	11	5	
III.....	5	134	96	6	200	97	11	334	97	9	32	78	20	57	74	29	89	75	6	8	57	11	7	40	17	15	47	6	8	57	4	5	55	10	13	57	4
IV.....	242	372	61.431	663	61	673	1,035	61	237	97	29	330	192	37	567	289	34	157	37	19	100	19	16	257	56	18	130	20	13	69	14	17	199	34	15		
V.....	242	372	61.431	663	61	673	1,035	61	237	97	29	330	192	37	567	289	34	157	37	19	100	19	16	257	56	18	130	20	13	69	14	17	199	34	15		

Foreign Language					
I.....	57	14	20	140	53
II.....	62	31	33	108	99
III.....	54	44	46	83	127
IV.....	50	102	67	87	174
V.....	11	145	92	14	159
Total....	234	336	59	432	612
History					
I.....	...	...	...	...	...
II.....	...	...	...	...	...
III.....	...	...	...	...	...
IV.....	...	...	...	...	...
V.....	...	...	...	...	...
Total....	...	...	...	...	...

TABLE II

SHOWING, FOR TWELVE CHICAGO HIGH SCHOOLS, THE PERCENTAGE OF THE PUPILS WHO ENTERED IN SEPTEMBER, 1905, AND WERE GRADUATED IN JUNE, 1909, AND OF THEIR CLASSMATES WHO WERE ELIMINATED EACH YEAR, FALLING IN EACH GROUP OF GRADES

	FIRST YEAR						SECOND YEAR						THIRD YEAR						FOURTH YEAR									
	Boys			Girls			Boys			Girls			Boys			Girls			Boys			Girls			Total			
	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Total
	Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		Eliminated	Graduated		
English	I.....	18	3	28	8	25	6	18	4	20	6	19	5	12	5	12	2	12	3	15	0	17	5	16	3	3		
	II.....	25	0	32	15	30	13	22	7	27	14	25	12	26	11	29	12	28	12	17	2	23	7	21	5			
	III.....	33	19	24	26	27	24	29	18	30	27	30	25	31	15	32	22	32	19	33	23	33	27	33	25			
	IV.....	23	39	15	33	18	35	31	41	21	33	25	30	30	40	25	46	27	43	34	42	27	38	30	39			
	V.....	1	31	1	18	1	23	1	31	1	20	1	23	1	30	2	18	2	23	1	33	0	23	0	27			
Mathematics	I.....	35	6	30	10	32	9	27	4	22	9	24	7	25	16	21	0	23	11	32	5	23	14	29	9			
	II.....	24	12	25	13	25	13	24	10	20	16	22	14	19	5	16	5	18	5	19	25	20	0	20	15			
	III.....	18	15	22	19	20	18	20	20	22	20	21	20	24	10	22	11	23	16	19	5	22	7	20	6			
	IV.....	21	31	23	27	22	28	26	33	30	26	28	28	38	30	47	29	41	25	25	29	43	26	32				
	V.....	2	36	1	30	2	32	4	33	6	30	5	31	4	22	11	37	7	27	5	40	6	36	5	38			

Foreign Language	I.....	24	4	32	9	30	7	18	4	25	10	23	9	23	3	24	8	23	6	19	8	26	3	23	5	
	II.....	26	9	25	16	26	14	22	8	23	12	22	11	14	5	21	13	18	10	17	16	23	9	21	12	
	III.....	23	13	19	21	26	18	26	25	24	23	25	24	28	25	26	28	27	27	29	12	31	9	30	10	
	IV.....	21	30	21	28	26	29	29	26	25	28	26	28	30	34	27	27	28	30	35	40	20	38	25	39	
	V.....	5	43	3	26	4	32	5	36	3	26	4	29	5	33	2	24	3	28	0	24	1	41	1	34	
History	I.....	..	..	..	..	..	..	..	24	10	28	8	27	9	22	2	19	5	20	4	22	11	18	4	19	7
	II.....	..	..	..	..	..	..	..	27	12	21	12	23	12	29	9	20	8	23	8	19	11	25	8	23	9
	III.....	..	..	..	..	..	..	..	23	23	26	24	25	23	24	9	27	14	26	13	32	11	29	10	30	10
	IV.....	..	..	..	..	..	..	..	22	21	21	19	22	20	22	30	30	36	27	33	27	45	27	36	37	40
	V.....	..	..	..	..	..	..	..	3	35	3	37	3	36	3	30	4	37	4	42	0	24	1	42	1	34

TABLE III
SHOWING, FOR THREE SMALL HIGH SCHOOLS, AND FOR ONE KANSAS CITY HIGH SCHOOL, THE DISTRIBUTION OF PUPILS WHO ENTERED IN SEPTEMBER, 1905, AND WERE GRADUATED IN JUNE, 1909, AND OF THEIR CLASSMATES WHO WERE ELIMINATED EACH YEAR, ACCORDING TO THE GRADES OF THAT YEAR'S WORK*

THREE SMALL HIGH SCHOOLS												KANSAS CITY HIGH SCHOOL*																				
First Year			Second Year			Third Year			Fourth Year			First Year			Second Year			Third Year			Fourth Year											
Boys	Girls	Eliminated	Boys	Girls	Eliminated	Boys	Girls	Eliminated	Boys	Girls	Eliminated	Boys	Girls	Eliminated	Boys	Girls	Eliminated	Boys	Girls	Eliminated	Boys	Girls	Eliminated	Boys	Girls	Eliminated	Boys	Girls	Eliminated			
																														Graduated	Eliminated	Graduated
I.....	2	0	7	1	2	1	10	0	0	3	0	0	11	0	6	1	31	6	4	0	29	7	0	1	27	1	1	4	19	4		
II.....	11	1	23	5	11	1	30	5	12	0	28	3	13	0	31	0	17	6	73	29	11	8	70	23	6	0	68	9	7	5	45	12
III.....	18	6	17	21	15	4	15	7	14	1	21	5	17	0	14	0	12	21	39	37	16	17	43	32	32	8	42	20	16	11	42	18
IV.....	14	10	9	6	7	2	9	6	6	2	10	1	7	0	6	1	3	28	2	27	9	20	5	18	8	9	10	10	1	9	14	8
V.....	5	8	1	3	1	5	0	3	3	0	0	2	1	1	0	0	28	1	12	0	19	0	6	0	8	0	7	0	2	0	1	
Total.....	50	25	57	36	36	13	64	21	35	6	62	9	39	1	63	1	38	84	146	111	40	73	147	86	46	26	147	47	25	31	120	43
Mathematics																																
I.....	1	0	17	1	3	0	7	1	2	0	14	0	1	0	1	0	3	3	30	5	5	1	25	4	2	1	0	0	0	0	0	1
II.....	12	2	21	10	10	0	32	2	15	0	37	1	9	0	10	0	11	4	56	16	7	6	51	9	3	0	10	0	0	4	4	1
III.....	13	3	15	11	14	1	22	4	8	1	17	1	5	0	4	0	16	16	40	29	12	13	47	10	13	2	27	4	1	5	2	2
IV.....	9	8	11	6	10	3	5	3	9	1	7	1	3	0	3	0	9	18	19	26	18	19	22	19	11	3	21	2	1	2	1	1
V.....	6	14	6	14	0	4	1	2	2	3	1	3	1	1	0	0	0	39	1	33	4	20	6	22	3	6	5	2	0	0	0	1
Total.....	41	27	70	42	37	8	67	12	36	5	76	6	19	1	18	0	39	80	146	109	46	59	151	64	32	12	72	8	2	11	10	6

*The numbers given for the Kansas City school are the totals of the numbers for each of two half-yearly grades; and the numbers given under "eliminated" in the last year for this school include some pupils who returned in the year 1909-10.

Foreign Language	I.....	1	0	14	1	18	3	4	0	23	0	5	0	33	0	2	1	40	2	0	34	1	2	0	21	1	0	5	15	11		
	II.....	10	1	26	I	15	1	29	3	0	29	2	3	0	13	0	10	4	57	13	9	48	12	6	0	27	5	7	3	14	10	
	III.....	14	9	19	I	15	11	20	9	0	12	2	4	0	10	0	17	10	53	20	16	3	60	17	11	1	42	10	11	2	13	8
	IV.....	11	1	11	I	9	10	1	6	2	11	8	2	0	6	1	15	11	24	34	11	7	32	14	8	2	20	3	7	2	16	10
	V.....	3	9	2	I	6	4	3	1	2	3	0	1	0	1	0	0	32	3	17	3	11	7	8	2	1	0	3	1	0	1	0
	Total.....	39	20	72	32	41	10	76	18	34	4	72	7	23	0	63	1	44	58	177	76	45	30	181	52	29	4	110	22	26	13	58	39
History	I.....	..	..	..	5	0	13	0	6	0	14	0	10	0	22	0	..	..	..	..	0	18	3	0	0	12	0	1	5	11	11	
	II.....	..	..	..	5	3	23	4	8	1	21	2	11	0	18	0	..	..	..	..	11	4	14	5	6	1	11	2	3	20	10	8
	III.....	..	..	..	6	5	19	7	11	1	11	2	7	0	10	0	..	..	..	..	15	10	9	6	15	3	10	2	25	8	5	10
	IV.....	..	..	..	..	..	5	3	2	1	4	1	6	0	3	1	..	..	..	..	12	25	14	7	7	5	16	5	4	2	14	10
	V.....	..	..	..	..	..	5	3	5	3	2	1	4	1	0	0	..	..	..	..	2	30	3	18	4	9	0	4	0	1	1	0
	Total.....	..	..	..	..	..	23	14	60	18	29	4	53	6	35	0	53	1	..	..	..	64	63	53	26	21	54	14	22	13	71	39

however, is not the total enrolment, but the total number of those eliminated in the one year in question and of those graduated in June, 1909. In Table II the data for the Chicago schools are presented in a somewhat different form. This table gives separately for each year, and for boys and girls separately and for both together, the percentage of the graduates and of the persons eliminated in that year whose grades fell in a given group of a given subject. Thus, 18 per cent of the boys who entered in September, 1905, and who were graduated in June, 1909, and 3 per cent of the boys who were eliminated during the first year, were in Group I (had an average standing of 90 or over) in the first year's work in English. The divergence between these percentages for the graduates and for the students eliminated measures the degree of correlation between elimination and class-standing. Incidentally this table indicates the relative standings of boys and girls and differences of grading in different subjects.

It would afford an interesting addition to this study if the data had been so collected as to compare the pupils eliminated each successive year not only with those who remained to graduate but with the entire class who returned the next year. But the study in its present form is designed to show in the most striking manner any qualitative difference which may exist between high-school pupils who are graduated and those who are not. Furthermore it is comparable in a general way with the similar study by Dr. Dearborn, who compares the average standings of all eliminated pupils, regardless of year or sex, with the average standings of all graduates for the entire course.

Conclusions regarding the amount of elimination are aside from the main purpose of this study, and such conclusions must be made subject to the following limitations: (1) Records of pupils who were transferred to some other school, records of a comparatively small number who graduated earlier or later than June, 1909, and a few records not properly filled out for eliminated pupils, were omitted. (2) The number of pupils taking any given course is always less than the total number of pupils enrolled; the nearest approach to equality is in English, where all of the work is required. (3) Pupils are counted as elimi-

nated not always in the year when they actually left but in the year when they had the last recorded grade; this causes an apparent exaggeration of the amount of elimination during the first year. (4) The percentage of elimination in the various years has been computed not on the basis of the entire enrolment but on the basis of the combination of those who were eliminated in the given year and those who were graduated in June, 1909.

In the sixteen high schools which this study includes there is a decided tendency to eliminate pupils of low class-standing. This general conclusion applies to all of the schools, to all four years, to all four subjects, and to both boys and girls; but the varying degrees in which it applies should be noticed.

The preponderance of elimination falls in the lower groups more distinctly in the Chicago and Kansas City schools than in the smaller ones; and it does so more clearly in all of the schools here studied than in those which Dr. Dearborn investigated.

It is also noticeable that the tendency to eliminate pupils of low class-standing is more pronounced among boys than among girls. The percentage of boys eliminated from group I is nearly always less than the percentage of girls from the same group, while the two percentages are always about equal in group V.

We may say that there is a slightly closer correlation between standing in English and elimination from school than there is between standing in other subjects and elimination, in the sense that the percentage of pupils dropping out of the fifth group in English is usually higher than in other subjects. But it should be remembered in this connection that all four years of English are required. Consequently failure in any year is much harder to overcome than failure in a subject where but one or two years are required.

In regard to elimination by years, there is some suggestion that during the last two years the elimination is more equally distributed among all the groups, excepting the fifth, than it is during the first two; but I hesitate to draw this conclusion seriously, in view of the small number of cases of elimination in the later years and of a few striking exceptions which occur in the statistics at hand. Perhaps it is safer to say only that

the general tendency is the same for all years, and that the lack of a steady rise in the percentage curve from the first to the fifth group is due to the smaller numbers which the curve for the later years represents.

In order that the reader may compare as nearly as possible the results obtained in Chicago with those obtained by Dr. Dearborn in the two Wisconsin cities I present Figs. 1 and 2. The main factor to be noted in explaining the different conclusions presented in these two studies is the relative quantity of elimination. In the Wisconsin cities about 45 per cent of the pupils in English were eliminated and less than 30 per cent of the pupils in mathematics; but in Chicago the total amount of elimination from the classes in English is about 72 per cent and from the classes in mathematics 67 per cent. The additional amount of elimination from the Chicago schools is concentrated in the lower groups.

To interpret adequately the foregoing conclusions, to say what underlying causes have been operative, and whether or not the high schools concerned are performing their function efficiently, would be a difficult task. I shall not discuss these things at length, but as a fitting conclusion to this study I shall mention a few of the fundamental questions which arise.

First of all, why is so large a percentage of elimination found in the lower groups? Apparently the causes are inherent in the schools themselves. Had the causes been accidental and external to the school organization, the percentage of elimination ought to be more or less uniform in all groups, owing to the established law of trait distribution. And doubtless the elimination from the first group is a fair indication of what that percentage would be.

Another fact suggesting that the causes of such elimination are inherent in the school is the variation which exists between different schools, especially between large and small schools. Quantitatively the elimination from the small schools is less and qualitatively it tends more toward the normal distribution. For example, in the work in first-year English, the percentage of elimination was only 36 per cent in the three small high schools,

as against 51 per cent for the Kansas City school and 62 per cent for the twelve Chicago schools; and the percentages of elimination for the five groups of grades in first-year English

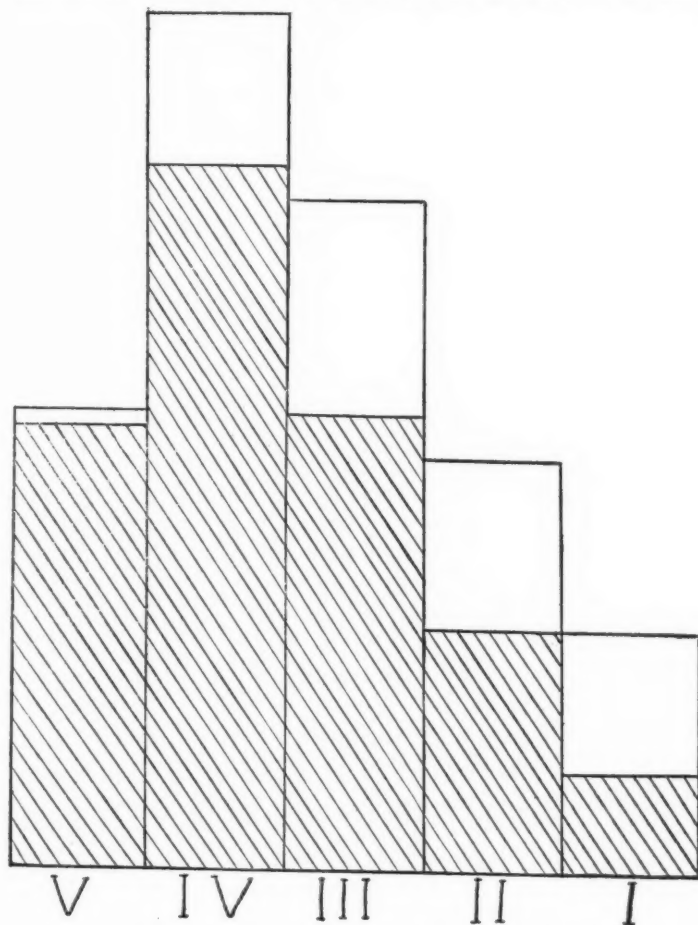


FIG. 1.—Showing in open columns the distribution according to average standings in English for four years of 742 pupils graduated from twelve Chicago high schools in June, 1909, and in shaded columns the distribution according to annual standings last recorded of 1,953 pupils eliminated from the same class.

were respectively 10, 15, 44, 41, and 65 for the three small schools, as against 16, 28, 53, 92, and 98 for the Kansas City school, and 30, 42, 59, 76, and 98 for the twelve Chicago schools. To my mind this indicates a closer personal relation which exists between teachers and pupils of the small high schools. Here it

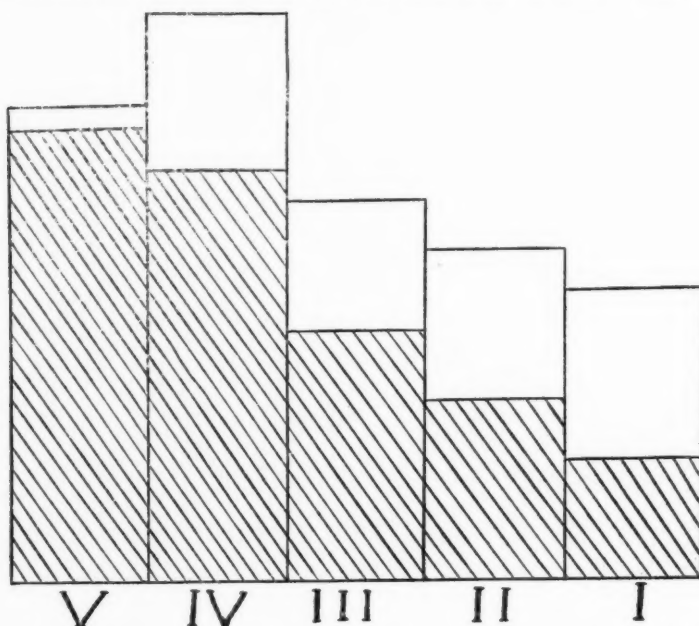


FIG. 2.—Showing in open columns the distribution according to average standings in mathematics for four years of 673 pupils graduated from twelve Chicago high schools in June, 1909, and in shaded columns the distribution according to annual standings last recorded of 1,414 pupils eliminated from the same class.

is much easier than in a large system to provide for the interests of every individual. Greater homogeneity of population exists; also the principal can become better acquainted with the home life and social environment of each pupil. The interests of the pupil and the interests of the school more frequently become harmonized and remain together, thus tending to reduce the quan-

tity of elimination to those whom causes accidental and external to the school organization take away.

Seemingly all of these schools, however, have set up certain arbitrary standards of academic attainment and have eliminated more or less consistently a large majority of those whom they judge inferior. They do this with even greater precision among boys than among girls. But it was pointed out earlier that this variation is due to the greater number of girls who drop out of the upper groups, perhaps indicating that girls leave the high school in greater numbers than boys do through other influences than the school itself. Nevertheless this judgment of inferiority passed upon pupils of either sex very definitely influences elimination. Now what does this judgment of inferiority mean? Surely it does not mean necessarily a general incapacity on the part of the pupil. At most it can mean only that the pupil is not well adapted to the specified academic program. Doubtless the pupil who leaves under the pressure of this adverse judgment makes in his own mind a reciprocal criticism of the school. He has come to realize that his interests and the established program of the school do not harmonize. He has felt the lack of co-ordination and he leaves to seek an occupation more suitable. Perhaps if the school had greater flexibility of academic requirement, if it permitted the election of manual and industrial work more freely, if it fully provided for individual differences in interest and capacity, these very pupils who now are eliminated systematically from the lower groups would actually remain until graduation and do well.

In the schools here studied the results seem to substantiate the judgment of Ayres that "our courses of study as at present constituted are fitted not to the slow child or the average child but to the unusually bright one."³ But as formerly suggested we would interpret "bright" as meaning the particular kind of brightness needed to deal with the existing school program.

Whether we see in this whole situation efficiency or inefficiency on the part of the schools will depend, of course, upon our conception of the function of the high school and of the gen-

³ Ayres, *Laggards in our Schools*, 5.

eral significance of elimination. If we look upon the high school as a great selective agency, preparing for college a few who are best adapted to a purely academic career, are not these high schools doing their duty well? An affirmative answer becomes all the more necessary in the light of recent investigations showing a high degree of correlation between standings in high school and subsequent standings in college.⁴ On the other hand, if we consider the high school as a great democratic and popular educative agency, whose business it is to lead all classes of young people to higher industrial and social levels, and if we look upon every case of elimination as a misfortune both to the individual and to society, then are not these schools exceedingly inefficient? By both the quantity and the quality of their elimination they stand accused.

Such an investigation as this, however, can only raise these larger and more fundamental questions of school organization. It cannot answer them. Evidently one important problem of school administration at present is to determine how far the high school is justified in yielding to the wants of those who are not in harmony with its program, and how far it shall operate as an eliminating agency.

⁴ See Dearborn, "The Relative Standing of Pupils in the High School and in the University," *Bulletin of the University of Wisconsin, High School Series*, No. 6.

MORE CONCENTRATION IN HISTORY WORK

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The radical defect in much of our history teaching is its superficiality, its thinness. We are forced to spread out so thin—over so large a space—that the pupil gets a most inadequate idea of the subject. Worst of all he forms the *habit* of superficial study—a fatal habit which should be avoided at all hazards. Far better would it be to take a few periods and study them until the pupils really know them! It is absurd to assume that, in order to teach history, one must cover the entire field. On the contrary, history can be taught far more effectively by cutting out a block, so to speak, and concentrating attention upon that until the pupil masters the facts, and sees how events follow one another and how institutions are developed.

Where four years are given to history work, in the high school, it is comparatively easy to arrange the course satisfactorily to teacher and pupils, but while a number of schools offer four years of history, very few of the pupils actually give this much time to it. The vast majority get only two years of history, although a considerable number may, in certain schools, take three years. The question then is, How can we make a short course in history most profitable to the students? By covering less ground and concentrating attention on certain important periods. But what part of the world's history should be omitted from a short course? I feel more and more keenly every day that high-school pupils should be given more English and American and less ancient history than is given in most cases at present. If only two years can be given to history, then, give *half* of it, at least, to English and American history and the other half to European. If three years are devoted to history, then give three-sixths of it to English and American, two-sixths to European history, and one-sixth to ancient (Greek and Roman) history.

Suppose, however, we confine the short course in history to

European, English, and American history. How may it be taught most effectively? I answer—By selecting a few lines of work and a few periods and concentrating attention upon them until the pupil masters them. The mediaeval period, to which one term or semester is usually devoted, is perhaps the most difficult period to cover in the time allotted. The mass of details is so great, the lines of development overlap at so many points, the phenomena are so foreign to modern thought, that a rapid survey, such as we are forced to make, is simply bewildering. How shall we work through the labyrinth? By selecting three or four definite lines and pursuing them as we would the main-traveled roads through a wilderness, not allowing ourselves to wander into by-paths and get lost in the woods.

What are the main lines of development during the Middle Ages? Are they not four, viz., the history of the church, of the Holy Roman Empire, of France, and of England? If we should give, as I think we ought to give, an entire semester to the mediaeval history of England, our task would be greatly simplified.

Beginning, then, with the fall of the Roman Empire, we would take up, first, the reigns of Clovis and Charlemagne and study carefully their efforts to reconstruct the Roman Empire. And by the way, I believe that we should begin the study of mediaeval history with the barbarian invasions of the Roman Empire and not with the post-Carolingian period. Say what we will, these attacks upon the Roman Empire may be more properly regarded as the beginning of a new era in the world's history than the fall of Charlemagne's empire.

After the Treaty of Verdun (843 A.D.) it is comparatively easy to trace the history and political development of France on through the age of the great mayors of the palace, the Capetian monarchy, etc., down to the Reformation. It is a continuous, clearly defined process. On the other hand, the rise and growth of the Holy Roman Empire, the Investiture strife, the Hohenstaufen period, the Crusades, the rise of towns, the House of Hapsburg, the Renaissance, and the Reformation may be satisfactorily taught.

The mediaeval history of England begins, of course, with the Anglo-Saxon invasions and the overthrow of Roman civilization in Britain, and by separating English from Continental history, we may emphasize more strongly than is otherwise possible Alfred's reign, the Norman rule, the Plantagenet period, especially the development of Parliament, the remarkable economic changes of the fourteenth and fifteenth centuries, the Hundred Years' War, the English Renaissance and Reformation.

The modern period, then, on the one hand, may be studied from the standpoint of French history, beginning with the religious wars of the seventeenth century, and running through the age of Louis XIV, Frederick the Great, the French Revolution, France, Germany, Austria, and Italy in the nineteenth century.

On the other hand, American history properly begins with the settlement of Jamestown, Plymouth, and Massachusetts Bay, and while one semester would be too short a period in which to do justice to the subject, we might, at least, study England in the seventeenth century, and trace American history down to the nineteenth century, if not to the Civil War.

By this process of elimination and concentration we might cover European and American history fairly well in four terms of a half-year each, the first term being devoted to the mediaeval history of Europe (the Continent), the second to England in the Middle Ages, the third to modern European (Continental) history, and the fourth to modern English and American history.

INSTITUTIONAL HISTORY IN THE HIGH SCHOOL

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Every earnest high-school teacher of history must feel that the mass of information contained in a textbook is very difficult to handle. Almost every serious pupil is bewildered and discouraged by the accumulation of detail presented. Often the result seems to be an acquisition of miscellaneous historical ideas which are effaced from memory with vexatious celerity; for the heterogeneity of the ideas present in the pupil's mind after the lesson is read hinders the formation of those natural associations which determine the tenacity of memory.

When we are helping high-school pupils to acquire historical knowledge we must remember that their concepts must of necessity be simple: they cannot be based on a large and miscellaneous mass of detail. Yet they must be complete: that is, they must contain answers to all the fundamental questions arising in the pupil's mind. Such complete concepts afford the best basis for the formation of memory associations, and for our immediate purpose of history instruction in the high school the most useful basis for the formation of historical concepts seems to be the institution. By making the high-school work in history largely a study of institutions it is possible to meet the requirements imposed by historical scholarship and by the intellectual limitations of high-school pupils.

By an institution I mean an established usage or a persistent manner of living among a group of people, whether established consciously, or unconsciously and gradually, by custom alone, by custom recognized in and reinforced by law, or at a definite time by decree or legislation. Human nature itself varies from age to age, from country to country; and the characteristics of its variants appear in human institutions. If we cannot reproduce Roman ideas as we can reproduce Roman

villas, yet we can approach even to Roman ideation through a careful study of many Roman institutions. On the other hand, the institutions of a period determine very largely the thought and the conduct of the men and women of that period. We might almost say that in their institutions a people forge their own fetters. Occasionally they break them: hence the narratives of wars and revolutions; and very often they are able to modify them to meet what they conceive to be new needs: hence legislation and the transmutation of custom. But human beings are products of the past; they are more conservative than they realize. They are in a very real sense under the domination of conditions within and without themselves that existed before their entry into life.

By a study of institutions, then, we may learn something of the temper, the psychology, the outlook on life, of groups of people in other epochs than our own; and moreover we may discover how institutions which are influential in the world today—the church, the theater, the university, the newspaper—came into existence. If our young people gain some insight into these varying manifestations of characteristic tendencies and some appreciation of our dependence upon the past, they should acquire more of judgment and balance, and should look out upon their own environment with more understanding.

By what principles shall a teacher be guided in selecting institutions for study? Clearly an institution selected should be characteristic of the people and of the age under consideration. It should be typical and symptomatic of a dominating state of mind among the individuals. Thus the city-states express the "particularism" of the ancient Greeks. Thus the mediaeval manorial and guild systems embody the mediaeval demand for restraint on freedom of action and the mediaeval requirement of collective activity and responsibility. Thus the growth of secret societies in the United States is symptomatic of a fraternal impulse born probably of frontier conditions, and perhaps also indicates a certain craving for those old-world trappings of nobility erroneously believed to have been left behind when the new democracy was set up in the wilderness.

Then, too, it should appear that the institution has definitely guided and controlled human lives, so that important historical events are clearly traceable to its presence. We know, of course, what effect the institution of slavery has had on the history of the United States; what is the connection between the institution of caste and the history of India; between feudalism or the papacy and the history of Europe. We are just discovering what is the relation between industrial institutions and the current history of this country.

Institutions which exist, or have existed, for the satisfaction of human wants are especially interesting. We, and our pupils, like to know how men and women in all times and places have habitually supplied their immediate needs. And the means—an institution—suggests the nature of the want. Institutional history may thus undertake a study of the evolution of human wants and the methods used in meeting them. Such an investigation is inevitably interesting, and it may have practical value.

The pupil has a certain experience of life and a first-hand acquaintance with not a few important existing institutions. The teacher may correlate the unknown with the known in such a way as to make the realized facts of existence more interesting and better understood. The institutions concerned with the production and exchange of wealth and with political life call for especial attention. Investigation of the craft-guilds will repay those concerned with manual training, and the rural courses require attention to the history of agriculture, while studies in both fields may well engage the student of "general history."

The institutions for the expression of the spirit of play indicate differences of popular temper from age to age and possess immediate interest for high-school pupils. Put into one study the Olympian games, the exhibitions of the Roman circus and amphitheater, the mediaeval tournament, and modern athletics, and there is acquired some insight into the characteristics of groups of people widely separated in time and space.

BOOK REVIEWS

Mental Discipline and Educational Values. By W. H. HECK. New York: John Lane Co., 1909. Pp. 147. \$1.00 net.

This book presents in short compass a well-balanced and useful statement of the present status of the old problem of mental discipline. Those who think that the partial reaction from the extreme view of the specialization of the mind to which the first experiments pointed is only a pendulum-like change of view have not understood recent experimental work. There is no longer any doubt in regard to the existence of the general effects of special practice. The question is now much more sharply defined. It is a question of conditions and particularly of the extent to which this more general influence of practice is carried and to what factors it is due. And the answer of experimental work is still that the influence is usually very much circumscribed in its effect, so that there may appear at times no effect on even what seem to be closely related abilities. The influence of any special practice or training may be to augment, to neutralize, or to inhibit the operation of functions which are sufficiently related to be affected at all.

The book is divided into eight chapters. The first includes a short historical statement of the problem with typical quotations from the writings of both those who have upheld and those who have been opposed to the doctrine of formal discipline. Under the chapter on observation some well-considered points of a more general nature are brought together, and in the third chapter, on experiments, a useful and on the whole discriminating summary of the experimental work is given.

The results and interpretations of the various experimenters are given by quotations from their work and are usually accepted at their face value. A more critical examination and weighing of the experimental evidence is much needed. The experiments of James and those of Ebert and Meumann are only mentioned, although their contributions are among the most important. To James belongs the credit of initiating the experimental testing of the question of formal discipline. His experiments on memory were not in themselves conclusive, but the method is the one used in all subsequent experiments and led to the more convincing work of Thorndike and Woodworth. The elaborate experiments of Ebert and Meumann, also in the field of memory, to which more detailed reference should have been made, have been the main experimental prop of those who now hold to some form of general mental discipline, since the experiments indicated a very large amount of the influence of special practice. The result is in part at least due to the inexcusable failure to provide check experiments.

Their experiments were arranged in the usual way: first, a series of tests of a dozen different sorts of memory or memory material, visual, auditory, for prose and poetry, logical passages, etc., followed by a month of daily practice in learning nonsense material, then a repetition of the preliminary tests to note any general effects of the work with the nonsense material. This was again

followed by another month of practice in the learning of nonsense syllables, and finally a second repetition—making three trials in all—of the series of tests. The results, which show a large increase in efficiency of general memory as indicated by the series of tests, are open to the serious criticism that *some* of the improvement would have appeared had the three series of twelve or more tests been alone committed to memory, i.e., without the intervening practice with the nonsense material. The improvement noted was only in part due to this latter drill. How much was due to it could have been determined by a parallel or check experiment on a similar group of subjects.

The chapter on localization of function, in which an attempt is made to relate the question of mental discipline to the findings of neurology and brain physiology, presents an obscure statement of ill-digested facts and hazy conceptions. The old faculty psychology does not lend itself to explanation in terms of modern conceptions of neurology, but the present modified views of formal discipline can be about as well explained in terms of brain psychology as can the views of the more specialized activity of the mind. The book would be much better without this chapter, which should certainly be omitted by the general student.

Under general concepts of methods a good summary is presented of the, on the whole, successful attempts that have been made to square the experimental findings with common sense and with our general observations and beliefs in the general efficacy of some specific mental disciplines. Such suggestions as the "identity of procedure" of Thorndike and the "general ideals" of Bagley are presented. The three concluding chapters discuss mainly the practical bearings of mental discipline in relation to school work.

The book is largely one of quotations rather than of original discussion, but will be found of value for class-room work because its choice and statement of material is excellent and because in the case of the experimental literature it brings together results which are scattered through many different journals.

W. F. DEARBORN

THE SCHOOL OF EDUCATION
THE UNIVERSITY OF CHICAGO

Teachers College Contributions to Education. No. 31, *The Training of Elementary School Teachers in Germany*. By I. L. KANDEL. Pp. vii+137. No. 32, *The Training of Teachers in England and Wales*. By PETER SANDIFORD. Pp. xiv+168. No. 33, *The Conflict of Naturalism and Humanism*. By WILLYSTINE GOODSSELL. Pp. vii+183. New York: Columbia University, 1910. \$1.50 each.

The dissertations of Doctors of Philosophy usually do not attract wide attention. Many of them have little significance outside the circles most directly concerned with them. The present volumes, however, are real contributions to education, and if published in ordinary book form and placed before school workers in the manner in which other educational works are presented they would have a wider circulation.

Dr. Sandiford and Dr. Kandel represent the training of both Manchester (England) and Columbia universities. Their discussions of the training of teach-

ers include the period in service as well as that given to preliminary studies. The chapters in this section will be suggestive to principals and superintendents who are concerned with increasing the efficiency of teachers already at work.

The subject is treated historically, with due regard to recent developments. I know of no other works which will enable the reader so easily to get at a fair interpretation of the general movement. Dr. Sandiford's chapter on the teacher as a civil servant, with much material in the corresponding division of the work on Germany, will be helpful in the newer efforts to restate the relation of the American teacher to the government and other social institutions.

Dr. Kandel devotes a chapter to the training of women teachers in Germany. The Prussian salary law of 1909 gave the same increase of initial salary to women and men. The distinction in training for secondary and for elementary schools is less marked in the case of women than it is in the case of men. A comparison of service ages of men and women shows much more favorably for the women than would be supposed, although the law requires that they drop out upon marriage. In parts of Prussia the dearth of men teachers has caused this law to be suspended.

Dr. Kandel's dissertation closes with a valuable comparative study of certain problems in Germany, England, and America. Among these are centralization, local adaptation, the union or separation of supervision of practice and the teaching of subject-matter and methods, and the various types of practice teaching, such as the probationary, laboratory, observational, apprentice, etc. In discussing America's indebtedness to Germany, Dr. Kandel says: "It bears excellent testimony to the progress which this country (America) has made in the science of education that in the field of elementary education Germany, her early teacher, has little to offer that is suggestive." In his conclusion he makes the statement: "While eminently successful in attaining their object, the German normal schools illustrate the dangers of applying bureaucratic methods in education. Superior authority and dictatorial methods are not calculated to develop initiative and personality, qualities which above all are desirable in a teacher."

The complexity of British conditions is well illustrated in Professor Michael E. Sadler's valuable introduction to Dr. Sandiford's dissertation. He says: "It is no exaggeration to say that there is probably no living man or woman in England or elsewhere who, if taken by surprise, could answer with accuracy all the questions of a searching examination paper dealing, in a comprehensive way, with the present educational conditions and regulations in the different parts of Great Britain and Ireland."

The chapter on statistical interpretation and comparison affords a summary of the situation. Since 1873 the total cost of education has increased tenfold while the part borne by local taxation has increased to one hundred and fifty-six times its original size. Yet the general government has firm control over the training and certification of elementary teachers and is rapidly assuming responsibility for the others.

The beginnings are shown in the training of secondary-school teachers since 1895, and more especially since the Education Act of 1902, which brought these schools under the control of the central authority. The first grants were made in 1908. The present grants available amount to only £5,000 (\$25,000).

"intended to promote the improvement of salaries and of teaching staff, and they should be supplemented for this purpose by at least an equal amount derived from other sources." The general policy is further shown by the assignment of £100 for each group of five students in training, no institution to receive more than £600. "After 1911 a university degree (with the exception of a few other qualifications of equal merit) will be an essential prerequisite. An interesting requirement is that half of the faculty must have had successful secondary-school experience. There must be not less than sixty days of practice teaching, at least forty of which are to be spent in secondary schools approved by the Board."

Dr. Sandiford indicates the stages of American influence upon England. The following quotations show some of the conclusions reached: "The best American normal schools are far superior to the English; the worst are far inferior to anything that England permits. . . . But the university education departments of America are undoubtedly the best in the world. Nowhere is there such pioneer work in scientific education being performed; nowhere is there greater freedom in experimentation allowed. . . . American normal schools could learn much from the English training colleges with regard to a healthy development of college athletics. . . . The logical solution (of the religious problem) is the complete secularization of the school, but this must be coupled with a strengthening of the work of the churches in all fields. . . . In the matter of state provision for training of teachers, other than elementary, England is far ahead of the states. . . . England and Wales have a national system of pension for elementary teachers . . . [which] will probably be extended ultimately to all teachers. . . . With respect to the curriculum . . . the faculties of the training colleges are perfectly free to reject the government schemes in favor of schemes of their own. . . . The kingdom-wide validity of the teacher's certificate, which terminates only at the pension age of sixty-five, undoubtedly contributes toward an excellent professional spirit among the teachers. This professional spirit is also fostered by the various teachers' associations which play such an important part in the educational affairs of the country."

Of less general interest but no less needed than these works is Dr. Goodsell's very comprehensive and well-written account of those influences in history which have shaped themselves as naturalism and humanism. Present-day issues in vocational and liberal education, the training of teachers, school government, and many other controverted topics could be handled much more economically and progressively if there were a better understanding of some of the less evident factors in the situation. The scientific attitude in education called for in the two dissertations just discussed requires this study of the larger situation.

In five chapters the author gives an adequate treatment of the movement from the period of the Greeks well through the nineteenth century. Her selection of material is well made. Special interests will miss here and there a topic, but many students who have not the time to organize source material for themselves will be able to make this dissertation the basis for experimentation in fields of direct usefulness.

Naturally the final chapter, upon the pragmatic solution of the problem, is less satisfactory, because it is concerned with pioneer projects, but it brings

these matters into relation to philosophical and, to some extent, to scientific principles. The democratic movement calls for a wider range of persons participating in responsibility for the changes which make for progress whether in industrial education or in the control of a teachers' association. Our experience has gone far enough to justify more statements of our thinking about what we have done, in order to be better ready for the next steps. Dr. Goodsell's work will help.

Produktive Arbeit. Beiträge zur neuen Pädagogik. Von FRITZ GANSBERG. Leipzig: Quelle & Meyer, 1909. Pp. vii+234. Illustrated. Unbound, M. 3.00; bound, M. 3.40.

A characteristically German work upon this subject would be of great value in our present discussions and experiments in vocational training. In Germany too there are many who are ready to take more account of the productive factor in education, the element of initiative, than has been common in the past. Unfortunately the present work does not seem fitted to meet either of these needs. It seems to be essentially unsystematic—something of a "common-place book" in which a school man, who has had some vision of the need of more objective teaching and of more democratic spirit, has jotted down his ideas or feelings upon "Mechanisierung in der Produktion," "Oeffentlicher Unterricht," "Siebenjährige Schriftsteller," "Impressionen Achtjähriger," "Objectiver Religionsunterricht," "Heimatkunde oder Kulturkunde," and fifty-nine other subjects. Dr. Kuyper's excellent studies of American schools are referred to, and evidently have been one of the author's inspirations in his campaign for self-activity.

Die Entwicklung des Kampfes gegen das Gymnasium. Von GUSTAV UHLIG. Wien und Leipzig: Carl Fromme, 1910. Pp. 24.

This address, given last October at the German Association of Gymnasien at Vienna furnishes a brief but comprehensive statement of the issues between the humanists and the "Realschulfanatiker," not only in recent struggles but also in earlier days. One can gain here from the reading of a few pages a view of the situation as seen by a strong partisan of the humanistic tendency. The address deals with the problems of modern languages, religious instruction, "Individualisierung," etc.

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The Principles of Education. By WILLIAM CARL RUEDIGER. Boston: Houghton Mifflin Co., 1910. Pp. xii+305. \$1.25 net.

The distinctive contribution of this book is its discussion of educational values and their realization through the curriculum. It contains valuable chapters on the practical, cultural, and formal values of the various subjects of study, the nature and origin of the curriculum, and the specific educational values of the humanities and the natural sciences. If the author had confined himself to a full development of these topics his book would occupy a more distinct and certainly a more useful field. As it stands it is weakened by the

inclusion of a number of other topics which, while probably legitimately included in a full treatment of principles of education, are here not sufficiently expanded to make the book a very good text, unless it be used only as an introduction to topics more fully treated by lectures and further reading. The chapters on "The Biological Bases of Education," "The Agencies That Educate," and "The Psychological Basis of Teaching" are particularly inadequate. The treatment of the biological side is too fragmentary to serve the needs of even a beginning class. So also it would seem that the psychological side should have been omitted, as falling properly in educational psychology, or else expanded beyond the bare outline of thirty-seven pages accorded to it here. The reviewer wonders also whether it is worth while to discuss the evolution of the school if only eight pages can be devoted to it.

The author devotes considerable space to a discussion of the aim of education, which closes with a useful chapter on formal discipline containing a fair summary of the current views upon the subject. Mr. Ruediger finds in the biological concept of "adjustment" the best statement of the end of education. "Education as adjustment," he says, "means fundamentally three things. It means intelligent mastery over one's environment, increased harmony with it, and increased appreciation of it." As the concept of adjustment is interpreted here and in other places in the book it is seen to have a connotation quite different from what it has in biology, and one wonders whether it would not serve the purposes of educational theory better to drop the term as inappropriate within the complex sphere of conscious evolution.

The book is well but not strikingly written. There are suggestive questions and exercises at the ends of the chapters. The discussions raise many problems, an adequate examination of which would pass far beyond the limits of a brief review. As we have pointed out, it seems to us that the most serious criticism upon the book is that it attempts to cover too much ground for its limited space and hence tends in places to be scrappy. Part of the difficulty, of course, inheres in the fact that there is not as yet any unanimity among educational thinkers as to the proper content of the principles of education. After all, it is perhaps best for each writer to include in his work all the topics which he regards as appropriate, leaving the decision to the public.

The Child and His Religion. By GEORGE E. DAWSON. Chicago: The University of Chicago Press, 1909. Pp. ix+124. \$0.75; postage 7 cents.

This little book contains four essays bearing upon the general subject of religious education: "Interest as a Measure of Values," "The Natural Religion of Children," "Children's Interest in the Bible" (originally published in the *Pedagogical Seminary*, July, 1900), and "The Problem of Religious Education." We shall here confine our attention to the last section.

After the analogy of secular education, the aim of religious education is said to be "religious adjustment to a progressive environment." Both religious and secular education are concerned with an identical environment, and hence the two types of education are to be distinguished on the side of the type of adjustment. All of man's natural and social environment is capable of being viewed religiously, and it is the specific function of the religious teacher to cultivate in

the child this point of view. According to the author, the prevailing attitude is that religion has nothing to do with the natural—that God manifests himself in this world by exceptions rather than by means of natural law. We doubt whether, even if this be the case, it has the significance attributed to it. However that may be, the author holds that the first prerequisite of religious education is that children be taught that all nature is the expression of the divine. As a generalization this is very good, but one wishes that the author had gone more into practical details. Even as an account of general principles it is certainly inadequate. The author refers to the kindergarten and the Young Men's Christian Association as illustrating the practical application of his ideal, but the illustration is hardly satisfying. What is the religious use to which all knowledge must be put? Religious ends are to take the place of secular ends in the interpretation of the world. There seems to be a contradiction in the argument, for in an earlier portion of the book the author held that all science is implicitly religious. It would seem to be a legitimate deduction from this conception of science that all scientific training would be at the same time religious training. It seems, moreover, that the author's conception of religious education is predominately intellectualistic, although he refers briefly to the feeling and motor responses as essential.

The aim of religious education as stated above may be criticized in a friendly way. There does not seem to be any real relation between the concept of adjustment as here outlined and the actual plan as outlined by the author. There is a certain suggestiveness in the concept of adjustment, but it has been largely overworked. It only very inadequately describes the process of growth in things intellectual, aesthetic, and moral. One who uses such a concept to describe these higher processes almost always tends to distort or narrow the facts to fit it. Now our interest in education is, not to illustrate any *a priori* theory of what education is, but to get a working understanding of the process itself; and we should studiously avoid all types of terminology which may tend to blind us to the real nature of the process under consideration. In this case, "adjustment to a progressive environment" is hopelessly vague. Just what sort of change must be effected in a child that it may be adjusted to a progressive rather than to a static environment? The statement throws no light upon the nature of the process in question. Certainly one must be capable of progressing along religious lines; but is this complex religious life, finely attuned to life's deeper values and capable not only of realizing them in action but also of growing into fuller and deeper appreciation of these values, adequately described as adjustment to a progressive environment? To cast the statement into such a form preserves a biological analogy; but does it not miss the quality really significant in the higher plane of development? This is not the place to develop or to defend a more adequate formulation, which, however, we believe to be possible.

IRVING KING

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The Roman Empire (B.C. 29-A.D. 476). By H. STUART JONES. ("Story of the Nations Series.") New York: Putnams, 1908. Pp. xxiii+476. With maps and illustrations.

An Outline History of the Roman Empire (44 B.C. to 378 A.D.). By WILLIAM STEARNS DAVIS. New York: Macmillan, 1908. Pp. ix+222. \$0.65.

The first of these books is a solid, fine piece of work, a presentation of the history of the Roman Empire at once popular and reliable. Furthermore, it meets a real need of the English-reading public, which until very recently has had no satisfactory, convenient guide through the period. This need was partially met by the remarkable one-volume treatment of the whole of Roman history by Mr. H. F. Pelham, but the limitation of space made that treatment brief, especially on the personal side. Mr. Jones, by devoting his whole volume to the Empire, is enabled to go into considerably greater detail.

True to the title of the series the book is a story—distinctly a narrative, and one well sustained throughout. It deals, however, not merely with the political side, but with all the other varied sides—institutional, social, intellectual, etc.—of historical development. It would indeed be difficult to find an important topic on which the book would not give satisfactory information. One finds told there with great clearness the story of the slow transformation of Republican institutions into those of an absolute monarchy; of Christianity's conquest of the Empire; of the gradual barbarization of the army and the culture of the Empire. This fulness of treatment combined with a reasonably good index makes the book a useful work of reference.

Other features of the book are equally satisfactory. The illustrations in particular are excellent, being photographic reproductions of buildings, statues, busts, and coins. The genealogical and chronological tables are helpful, as are also the maps, although these latter are by no means a noteworthy feature of the volume. In conclusion one may well emphasize the scholarly spirit and the literary feeling which pervade and animate the whole work.

It is the latter of these qualities, literary feeling, that may be said chiefly to characterize the second book under discussion. Mr. Davis has attempted to give us a primer on the same period as that covered by the more elaborate work of Mr. Jones. Mr. Davis' specific object was to meet a need felt in teaching college classes in mediaeval history. The book might very well help to bridge the gap, between the death of Augustus and the fall of the Empire, that frequently used to exist in the student's knowledge. But whether with the accounts of Myers, Botsford, West, and Pelham this little book offers enough in the way of more recent views, fuller information, different proportion, and attractiveness of style to justify its existence may be a question.

The appendix contains useful chronological data and information on the magistracies and on provincial administration.

CURTIS H. WALKER

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BOOKS RECEIVED

EDUCATION AND PSYCHOLOGY

- Handwriting.* By EDWARD L. THORNDIKE. (*Teachers College Record*, XI, 2.) New York: Columbia University Press, 1910. Pp. 93. With many charts. \$0.30.
- Education in Sexual Physiology and Hygiene.* A Physician's Message. By PHILIP ZENNER. Cincinnati: Robert Clarke Co., 1910. Pp. viii+126. \$1.00 net.
- Vocational Education.* By JOHN M. GILLETTE. New York: American Book Co., 1910. Pp. viii+303. With diagrams.
- The Qualities of Men.* An Essay in Appreciation. By JOSEPH JASTROW. Boston: Houghton Mifflin Co., 1910. Pp. xv+183. \$1.00.
- The Unexplored Self.* An Introduction to Christian Doctrine for Teachers and Students. By GEORGE R. MONTGOMERY. New York: G. P. Putnam's Sons, 1910. Pp. ix+249. \$1.25.

ENGLISH

- How to Teach English Classics.* Suggestions for Study, Questions, Comments, and Composition Assignments. By CHARLES SWAIN THOMAS. (Riverside Literature Series, Extra Number 1.) Boston: Houghton Mifflin Co., 1910. Pp. iv+132. Paper, \$0.15.
- Essentials of Public Speaking for Secondary Schools.* By ROBERT I. FULTON AND THOMAS C. TRUEBLOOD. 2d ed. Boston: Ginn & Co., 1910. Pp. xiv+250.
- Written English.* A Guide to the Rules of Composition. By JOHN ERSKINE AND HELEN ERSKINE. New York: The Century Co., 1910. Pp. viii+70.
- Selected Dramas of John Dryden.* With *The Rehearsal*, by GEORGE VILLIERS, DUKE OF BUCKINGHAM. Edited with Introduction and Notes by GEORGE R. NOYES. Chicago: Scott, Foresman & Co., 1910. Pp. lvi+504.
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- Twentieth-Century Textbooks. *Autobiography and Selected Essays.* By THOMAS HENRY HUXLEY. Edited with Introduction and Notes by SARAH F. SIMONS. Pp. xl+208. With portrait. *Selected Essays of Lamb.* Edited with an Introduction and Notes by HOWARD BEMENT. Pp. lv+285. Illustrated. New York: D. Appleton & Co., 1910. \$0.40 each.
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- JULIAN W. ABERNETHY. Pp. 133. New York: Charles E. Merrill Co., 1910. Illustrated. \$0.25 each.
- The Lake English Classics. Edited by LINDSAY TODD DAMON. *Cranford*. By MRS. ELIZABETH GASKELL. Edited for School Use by ALBERT ELMER HANCOCK. Pp. 278. *An Inland Voyage and Travels with a Donkey*. By ROBERT LOUIS STEVENSON. Edited for School Use by ARTHUR WILLIS LEONARD. Pp. 254. Chicago: Scott, Foresman & Co., 1910. \$0.35 each.
- The Children's Plutarch*. Plutarch's Lives Told in Simple Language, with a Special Topical Index. By F. J. GOULD. With an Introduction by W. D. HOWELLS. Illustrated by WALTER CRANE. *Tales of the Greeks*. Pp. xv+167. *Tales of the Romans*. Pp. xvii+171. New York: Harper & Bros., 1910. \$0.50 each.
- Harper's Book of Little Plays*. By MARGARET SUTTON BRISCOE, JOHN KENDRICK BANGS, CAROLINE A. CREEVEY, MARGARET E. SANGSTER, AND OTHERS. Selected for Home and School Entertainments, with an Introduction by MADALENE D. BARNUM. Illustrated by HOWARD PYLE AND OTHERS. New York: Harper & Bros., 1910. Pp. xii+142. \$0.75.
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- The Man without a Country and Other Stories*. By EDWARD EVERETT HALE. Edited with Introduction and Notes by SAMUEL MARION TUCKER. (Macmillan's Pocket Classics.) New York: Macmillan, 1910. Pp. xxviii+200. With a portrait. \$0.25 net.
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- Calvert of Maryland*. A Story of Lord Baltimore's Colony. By JAMES OTIS. New York: American Book Co., 1910. Pp. 166. Illustrated. \$0.35.

FRENCH AND GERMAN

- Anthology of French Prose and Poetry*. By WILLIAMSON UPDIKE VREELAND AND RÉGIS MICHAUD. Boston: Ginn & Co., 1910. Pp. xii+435. \$1.40.
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HISTORY AND CIVICS

- Reading References for English History*. By HENRY LEWIN CANNON. Boston: Ginn & Co., 1910. Pp. xv+559. \$2.50.
- The Story of Old France*. By H. A. GUERBER. (Eclectic School Readings.) New York: American Book Co., 1910. Pp. 374. Illustrated. \$0.65.

Travels in History. By MARK TWAIN. Selected by C. N. KENDALL, and Arranged for Home and Supplementary Reading in the Sixth, Seventh, and Eighth Grades. New York: Harper & Bros., 1910. Pp. ix+171. Illustrated.

Readings in Civil Government. By PERCY LEWIS KAYE. New York: The Century Co., 1910. Pp. xvi+535.

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Domesticated Animals and Plants. A Brief Treatise upon the Origin and Development of Domesticated Races, with Special Reference to the Methods of Improvement. By E. DAVENPORT. Boston: Ginn & Co., 1910. Pp. xiv+321. Illustrated. \$1.25.

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New Geographies. First Book. By RALPH S. TARR AND FRANK N. McMURRY. With many colored maps and numerous illustrations, chiefly photographs of actual scenes. New York: Macmillan, 1910. Pp. x+263. \$0.65 net.

A Text-Book on Advanced Algebra and Trigonometry, with Tables. By WILLIAM CHARLES BRENKE. New York: The Century Co., 1910. Pp. x+345.

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Christmas Carols and Hymns. For School and Choir. Compiled and Edited by HOLLIS DANN. New York: American Book Co., 1910. Pp. 111. \$0.45.

CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS¹

IRENE WARREN

Librarian, School of Education, The University of Chicago

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- ANDREWS, BENJAMIN R. The schools of household and industrial arts—Teachers College. Col. Univ. Q. 12:397-407. (S. '10.)
- BATTEN, S. Z. Methods of training for social service. Relig. Educa. 5:390-98. (O. '10.)
- BENNETT, CHARLES A. Visiting manual training schools in Europe—VI. Man. Train. Mag. 12:28-46. (O. '10.)
- BICKNELL, PERCY F. A child of the Orient in the turmoil of London. Dial 49:226-27. (I O. '10.)
- BJÖRKMAN, EDWIN. William James: builder of American ideals. R. of Rs. 42:463-67. (O. '10.)
- BLAIR, R. The relation of science to industry and commerce. School W. 12:390-91. (O. '10.)
- BOTKIN, ALICE SINCLAIR. The relation of outside subjects to major subjects in the high school. Educa. 31:103-7. (O. '10.)
- BOURNE, HENRY E. Reminiscences of an English teacher. Dial 49:232-33. (I O. '10.)
- BROWN, DAISY R. Young people's ideas of the value of Bible study. Pedagog. Sem. 17:370-86. (S. '10.)
- BROWNSON, CARLETON L. The relations between colleges and secondary schools: tendencies and possibilities. School R. 18:548-59. (O. '10.)
- CALDWELL, OTIS W. Natural history in the grades: Seventh and eighth grades. El. School T. 11:49-62. (O. '10.)

¹Abbreviations.—Chau., Chautauquan; Col. Univ. Q., Columbia University Quarterly; Educa., Education; Educa. R., Educational Review; El. School T., Elementary School Teacher; Geographical T., Geographical Teacher; Journ. of Educa., Journal of Education; Journ. of Educa. Psychol., Journal of Educational Psychology; Liv. Age, Living Age; Man. Train. Mag., Manual Training Magazine; Pedagog. Sem., Pedagogical Seminary; Pop. Sci. Mo., Popular Science Monthly; Primary Educa., Primary Education; Psychol. Clinic, Psychological Clinic; R. of Rs., Review of Reviews; Relig. Educa., Religious Education; School R., School Review; School W., School World; Teach. College Rec., Teachers College Record.

- CHASE, HARRY WOODBURN. Psychoanalysis and the unconscious. *Pedagog. Sem.* 17:281-323. (S. '10.)
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- COE, GEORGE A. Responsibility of the college for the student. *Relig. Educa.* 5:302-6. (O. '10.)
- DAVIS, BENJAMIN MARSHALL. Agricultural education: Periodical literature. *El. School T.* 11:79-89. (O. '10.)
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- FELMLEY, DAVID. The educational value of manual training. *Man. Train. Mag.* 12:1-8. (O. '10.)
- FISKE, G. WALTER. Student self-government in colleges. *Relig. Educa.* 5:307-15. (O. '10.)
- FLEMING, WALTER L. General William T. Sherman as a history teacher. *Educa. R.* 40:235-38. (O. '10.)
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- . What can the public school do for sub-normal children? *Training School* 7:242-48. (S. '10.)
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- HARRIES, A. H. Some faults in the teaching of geography in secondary schools, and some remedies. *Geographical T.* 5:271-75. (Summer '10.)
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- HUEY, EDMUND B. The Binet scale for measuring intelligence and retardation. *Journ. of Educa. Psychol.* 1:435-44. (O. '10.)
- HUGHES, PERCY. The distinction between the liberal and technical in education. *Pop. Sci. Mo.* 77:379-85. (O. '10.)
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- MCKEAG, ANNA J. The use of illustrative experiments in classes in education. *Journ. of Educa. Psychol.* 1:467-72. (O. '10.)
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- MARIE, HAMILTON W. A French circulating library. *Outlook* 96:316-20. (8 O. '10.)
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- MANN, CHARLES RIBORG. Physics and education. *School R.* 18:541-47. (O. '10.)
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- MUIRHEAD, JOHN H. The religious basis of education. *Relig. Educa.* 5:281-95. (O. '10.)
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- SHEFFIELD, ALFRED DWIGHT. The rational study of English grammar. *School R.* 18:618-26. (N. '10.)
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- STARBUCK, EDWIN D. Authority and democracy in colleges. *Relig. Educa.* 5:315-26. (O. '10.)
- STEVENS, ROMIETT. Stenographic reports of high-school lessons. *Teach. College Rec.* 11:1-66. (S. '10.)
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- TAYLOR, CHARLES KEEN. The boy in the private school. *Psychol. Clinic* 4:132-35. (O. '10.)
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- TOWN, CLARA HARRISON. The training of a case of infantile stammer. *Psychol. Clinic* 4:136-40. (O. '10.)
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- WENLEY, R. M. A symposium on the value of humanistic, particularly classical studies: The classics and the new education: II. The classics and the elective system. *School R.* 18:513-29. (O. '10.)
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